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Applicants: Verschueren Wim Gaston et al.

Serial No. : 10/554712

Art Unit:

Filed

: 04/27/2004

Examiner:

For

: HIV Integrase Inhibitors

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Alana G. Kriegsman
(Name of applicant, assignee, or Registered Representative)

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/Alana G. Kriegsman/ Alana G. Kriegsman Reg. No. 41,747 Attorney for Applicants

Johnson & Johnson One Johnson & Johnson Plaza New Brunswick, NJ 08933-7003 (732) 524-1495 DATED: August 16, 2006 Under the Paperwork in Substitute for form 1449A/PTO

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FOREIGN PATENT DOCUMENTS

Pages, Columns, Lines, Foreign Patent Document Date of Publication of Cited Document where relevant Name of Patentee or Examiner Cite passages or relevant mm-dd-yyyy Applicant of Cited Document Initials figures appear Number⁴ KindCode⁵ Office³ No.1 ΕP 0459449 В1 Shionogi & Co., LTD. 12-21-1994 ΕP В1 0499299 NanoSystems LLC 08-16-2000 EΡ 0721331 В1 **AstraZenecaAB** 12-05-2001 wo 94/05263 Α1 Janssen Pharmaceutica N.V. 03-17-1994 wo 97/44014 A1 Janssen Pharmaceutica N.V. 11-27-1997 WO 98/42318 Α1 Janssen Pharmaceutica N.V. 10-01-1998 wo 02/030426 Α1 Merck & Co., Inc. 04-18-2002 WO 02/030930 A2 Merck & Co., Inc. 04-18-2002 Merck & Co., Inc. 04-18-2002 WO 02/030931 A2 WO 02/036734 **A2** Merck & Co., Inc. 05-10-2005 wo 02/055079 A2 Merck & Co., Inc. 07-18-2002 WO 2004/035576 A2 Gilead Sciences, Inc. 04-29-2004 wo 2004/035577 A2 04-29-2004 Gilead Sciences, Inc.

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illiais	140.	BENET, L. et al., "Pharmacokinetics: The Dynamics of Drug Absorption, Distribution, and Elimination.", Goodman and	
		Gilman's The Pharmacological Basis of Therapeutics, Eighth Edition, pages 13-20, McGraw-Hill Inc.	
		CROSS, et al., "Rules For The Nomenclature of Organic Chemistry, Section E: Stereochemistry." Pure & Applied Chemistry, 1976, pages 13-30, Vol. 45., Pergamon Press, Great Britain.	
		DENIAU et al., "Synthesis of 3-alkyl-1-isoindolinones By Alkylation of a Benzotriazolyl Substituted N-dimethylamino- phthalimidine.", Tetrahedron, 2001, pages 2581-2588, Vol. 57.	
		GOTO et al., "The Thermally-Controlled Chemoselective Reduction of 5H-Pyrrolo[3,4-b]pyridine-5,7(6H)-dione with Sodium Borohydride.", Bulletin of the Chemical Society of Japan, 1987, pages 4178-4180, Vol. 60, No.11.	
		HARTMANN et al., " Preparation of Naphthoquinone Imines As NIR Dyes.", <u>Tetrahedron</u> , 1995, pages 4655-4664, Vol. 51, No. 16.	
<u>-</u> ' <u>-</u>		HERTOGS, K. et al., "A Rapid Method for Simultaneous Detection of Phenotypic Resistance to Inhibitors of Protease and Reverse Transcriptase in Recombinant Human Immunodeficiency Virus Type 1 Isolates from Patients Treated with Antiretroviral Drugs.", Antimicrobial Agents and Chemotherapy, Feb. 1998, pages 269-276, Vol. 42, No. 2.	
-		HEYNS et al., * Über Die Synthese Von 2,3-Dialkylpyrazinen.", <u>Chemische Berichte</u> , 1981 , pages 240-245, Vol. 114, English Abstract included.	•
		JENKINS et al., "A Soluble Active Mutant of HIV-1 Integrase.", The Journal of Biological Chemistry, March 29, 1996, pages 7712-7718, Vol. 271, No. 13.	
		KAPPE et al., "Generation and Subsequent Cycloaddition Chemistry of <i>α</i> -Amino Isobenzofurans Formed by Cationic Cyclization.", <u>Tetrahedron Letters</u> , 1995 , pages 9285-9288. Vol. 36, No. 51.	
		KREPELKA et al., "Synthesis and Antineoplastic Effects of Some N-Substituted Imides of 1-Substituted 4-Aryl-Naphthalene-2,3-Dicarboxylic Acids.", Collection Czechoslovak Chem. Commun., 1982, pages 304-314, Vol. 47(1).	
-	_	MILEWSKA et al., "Synthesis of Lactams by Regioselective Reduction of Cyclic Dicarboximides.", Synthesis, December 1996, pages 1485-1488.	
		MURRAY et al., "Facile Access to Novel 1,4-Dihydroxynaphthalene-2,3-dicarboximides and Heterofused Analogs.", Synthesis, 1996, pages 1180-1182, Vol.10.	
		OHWADA et al., "Reaction of N-Aminophthalimide Derivatives With Aluminum Chloride In Benzene.", <u>Heterocycles</u> , 1997, pages 225-233, Vol. 46.	-
		PADWA et al., "Studies Dealing With the Cycloaddition/Ring Opening/Elimination Sequence of 2-Amino-Substituted Isobenzofurans.", J. Org. Chem., 1997 pages 2786-2797, Vol. 62.	
		PASSANNANTI et al, "The Synthesis of Narciclastic Aldehyde and Related Isocarbostyrils.", <u>Journal of Heterocyclic</u> Chemistry, 1977, pages 103-106, Vol. 14, No. 1.	
		ROGGO et al., "Novel Spirodihydrobenzofuranlactams as Antagonists of Endothelin and as Inhibitors of HIV-1 Protease	
		Produced by Strachybotrys sp I. Fermentation, Isolation and Biological Activity.", The Journal of Antibiotics, 1996, pages 13-19, Vol. 49 No. 1.	
		SPIESSENS et al., "Preparation and Structural Assignments of Some Isomeric 2,3-Disubstituted Pyridines.", <u>Bull. Soc. Chem. Belg.</u> , 1980 , pages 205-231, Vol. 89, No. 3.	
		TROLL et al., "Darstellung Und Reationen Von 1,3-Bis-Trimethylsilyloxy-Isobenzofuranen Und –Isoindolen.", Tetrahedron Letters, 1981, pages 3497-3500, Vol. 22, No.36, Pergamon Press Ltd., English Abstract included.	
		TROLL et al., "Darstellung Und Reationen Von 1,3-Bis-(Trimethylsiloxy)-Isobenzofuranen.", <u>Tetrahedron Letters</u> , 1984, pages 2981-2984, Vol. 25, No. 28, English Abstract included.	
		UEDA et al., "Synthesis of Pyrazolone Derivatives. XXVI. 1) Reaction of 1-Methyl-2-phenyl-1,2,3,10-tetrahydro[6,7]thiepino[3,4-c]pyrazole-3,4-dione with Dimethyl Acetylenedicarbozylate.", Chem. Pharm. Bulletin, 1976, pages 596-606, Vol. 24, No. 4.	_
		VORS, Jean-Pierre, "A Convenient Synthesis of Pyridazine-3,4-dicarboxylic Acid by a Hetero Diels-Alder Reaction.", Journal of Heterocyclic Chemistry, 1990, pages 579-582, Vol. 27, No.3.	
		XP-002256901, Database Accession No. BRN:145097, Rocz. Chem., 1996, page 653, 657,661, Vol. 36.	
		XP-002256902, Database Accession No. BRN:148975, Rocz. Chem., 1962, page 653, 657, 661, Vol. 36.	

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